

Embedding environmental quality into Nature-Based Interventions for health

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We are also very grateful to Friends of Bottesford Beck, East Riding of Yorkshire Council, Natural England, Rewilding Youth, and TCV for their involvement with the workshop and input into resource development needs.



Context

Nature-based interventions (NBIs) aim to improve the physical and mental health of participants through spending time in nature. The quality of the environments used is important for positive outcomes for all involved, but currently this is rarely measured or evaluated.

Understanding the importance of environmental quality will increase opportunities for multiple health and environmental gains will help to embed environmental sustainability into the activities of NBI providers' business cases for funding from green social prescribing (GSP) initiatives.



Aims

- Strengthen connections among early-career researchers and organisations providing, or with the potential to provide, conservation or community gardening activities in Humber and North Yorkshire.
- Identify different perspectives on green/blue space quality and views on the opportunities for improving how this is considered as part of the funding, development and evaluation of NBIs.
- Provide research evidence on the assessment and evaluation of green/blue space quality that is relevant to the needs of NBI providers.
- Provide a foundation for further knowledge exchange that supports both nature recovery and health co-benefits from NBIs.

Interviews: Methods

Eleven semi-structured interviews were conducted with representatives from project partner organisations. They followed a topic guide that guided conversation to include:

- Information about the organisation and the green and blue spaces they use
- The role and importance of the quality of the green and blue spaces used, and how that quality is currently assessed (if at all)
- The evidence-related needs organisations may have to be able to better understand and assess environmental quality
- What resources or tools organisations require to support this

Interviews were conducted by three different researchers and lasted on average one hour. The interviews were recorded and transcribed for further analysis. Both the interviews and the following workshop received approval from the Department of Environment and Geography Ethical Review Committee.

Interviews: Data analysis

Interview transcripts were coded using NVivo 20 qualitative data analysis software package. Coding began with a deductive approach using the key themes from the topic guide. Additional codes were added inductively where further information was introduced by participants. Coding was conducted by one researcher and two transcripts (~20%) were blind coded by an independent researcher for quality assurance.

The coding process identified seven key themes relating to environmental quality (see next slide), along with wide ranging information about the benefits and challenges of working outdoors, the importance of the environment for good outcomes for staff, volunteers and participants, the learning opportunities, and the potential benefits to these organisations that could come from networking and collaboration, resource provision and support with funding.

Interviews Results: Environmental Quality Key Themes

Aesthetics

Perceptions of green and blue spaces can have positive and negative impacts for participants, staff and volunteers with direct and indirect impacts to the user (e.g., spaces that are perceived as positive, beautiful, and visually satisfying are associated with positive impacts on health and wellbeing and user engagement with the space).

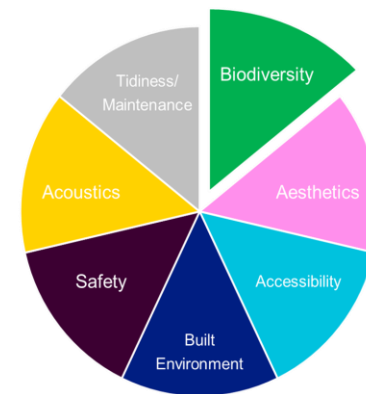
Accessibility

Aspects of the environment considered accessible/inaccessible can have direct and indirect impacts on usability and engagement with the space, in addition to mental health and wellbeing outcomes of participants, staff and volunteers. This includes physical, psychological, and infrastructural accessibility; challenges to accessibility; and opportunities for widening access (e.g., appropriate infrastructure such as safe paths, wheelchair access, public transport, and the provision of information can affect usability, engagement with the space, and directly and indirectly impact on users' mental health and wellbeing outcomes).

Biodiversity

Biodiversity can have both positive and negative impacts for users of blue and green spaces. Positive impacts include appreciation of plants and animals and associated positive benefits to mental health and wellbeing. However, perceptions of spaces being untidy or unmaintained (e.g., rewilded), or fear of certain species (e.g., insects) can result in negative impacts for the user (e.g., not engaging with the space, negative impacts to mental health and wellbeing).

What do we mean by “Quality”?



Interviews Results: Environmental Quality Key Themes

Built Environment

The availability or lack of amenities, facilities, services, and built environment (including built heritage) of the environment can directly and indirectly affect usability, engagement and mental and health and wellbeing outcomes of participants, volunteers and staff (e.g., suitable facilities can support use of space and programme delivery, and indirectly impact users' mental health and wellbeing).

Safety

Perceived safety of the space, including psychological and physical safety, can directly and indirectly affect usability, engagement with the space, in addition to mental health and wellbeing outcomes (e.g., a welcoming, non-judgemental and supportive space has positive impacts on useability, engagement with the space, and mental health and wellbeing outcomes).

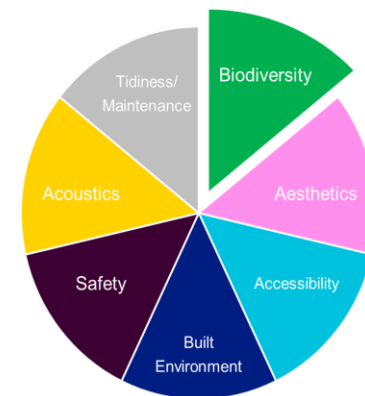
Acoustics

The sounds and acoustics of green and blue spaces can have positive and negative impacts, and directly and indirectly affect useability, engagement with the space, and mental health and wellbeing outcomes (e.g., nature sounds and bird song are perceived as having positive impacts on wellbeing; sheltered spaces can buffer urban noise and positively impact on engagement and user's mental health and wellbeing).

Tidiness/Maintenance

Aspects of the environment which are related to cleanliness, tidiness and maintenance can affect usability, engagement with and ownership of the space, and have direct impacts on mental health and wellbeing (e.g., neglected, unkept, dirty spaces, and vandalism act as a deterrent for space usability, engagement, and embedding ownership of spaces; and have negative impacts on users' mental health and wellbeing).

What do we mean by “Quality”?



Workshop

A workshop was held on 20th June at Waters Edge, Barton-on-Humber. The workshop involved 6 researchers from the University of York and Salford University and 20 people from VCSE and public sector organisations involved in nature recovery, community engagement and nature-based activities for health.

The workshop involved structured and unstructured networking opportunities. Most participants had not met each other before.



Workshop

We used topic cards in discussion groups to discuss various aspects of environmental quality. We also discussed how to make sure that both 'people for nature' and 'nature for people' is considered. The workshop finished with a walk along the estuary.



Workshop feedback

16 responses:



"Brilliant opportunity to get many different organisations/people in one room and to feedback to each other and academics"

"I just wanted to write and say a huge thank you again for yesterday's session. It was great: the format, the venue, people facilitating and the people / organisations you'd invited to take part. All of which led to a lot of very interesting, shared and different experiences and potentially some new collaborations and connections. Please pass on my thanks to everyone."

"Thank you for yesterday. Lots of really interesting chats and conversations. Lots of good connections made as well."

Resources: interviewees requirements



Resource development

Interview participants were asked if there were any specific outputs or formats of resources about environmental quality that they would consider to be particularly beneficial or relevant for their organisation.

Their suggestions were presented to workshop participants, who ranked their top four preferred options, resulting in the ranking shown in this table.

The team aims to provide at least the top three highest ranked resources to workshop participants and their organisations.

Rank	Resource	Weighted average score
1	Environmental evaluation 'how to' guide	3.29
2	Support network of similar organisations	2.78
3	Targeted summaries of the evidence	2.75
4	Full reports on the evidence	2.67
5	Educational materials	2.56
6	Short reports on the evidence	2.38
7	Newsletter	2.29
8	Bite-sized summaries of evidence	2.25
9	Infographic summaries	1.67
10	Social media content	1.33

Resource development

Working with HEY Smile Foundation, the University of Salford and partner organisations the following resources for organisations delivering NBI are in development:

A 'how to' guide infographic about the evaluation of environmental quality

This guide will present the reasons and methods for environmental quality evaluation, providing links to further resources to support the implementation of monitoring.

Evidence Summaries

Short summaries of the evidence will allow organisations to understand the importance of environmental quality, and in turn communicate this to funders and other stakeholders.

Support networking opportunities

With their permission, the contact details of all project partners were shared to allow for the further development of the connections made as a result of this project. Participants were welcomed to join an existing network of similar organisations in North Yorkshire and the Humber hosted by the HEY Smile Foundation.

Research Impact

On 30th August Trish Darcy presented the project results on behalf of the team at the Royal Geographical Society Annual International Conference.



The project team are preparing an academic paper.

Summary

Many conservation volunteering activities, 'Nature-Based Interventions' and green social prescribing programmes result in benefits for nature, participants and for the wider community. However, current funding and evaluation frameworks often focus on either nature or health and can be difficult to navigate.

Project partners varied in their relative emphasis on nature recovery, nature engagement and health. However, all described various aspects of environmental 'quality' and how this is important for participants, volunteers, staff and the community. The quality of green and blue spaces influence the whole 'life cycle' of how nature-based health or engagement programmes are designed and delivered. For most staff and volunteers their core motivations are to support nature recovery and to help people to engage with nature. Improvements in environmental quality can happen directly through participant volunteering, or indirectly through wider changes in behaviour. Activities to improve aspects of a natural space are an important way in which participants/volunteers receive health and wellbeing benefits.

Interviews and the workshop demonstrated a depth of experience amongst organisations supporting the connections between health and nature recovery. However, referral pathways for people who could benefit the most from these programmes are still at a relatively early stage in the region. Some partners described a disconnect between the NHS and VCSE nature-based organisations. The project provided networking opportunities for organisations working on nature and health in the region and identified needs relating to evaluation and the use of evidence. Resources to address these needs are now being developed.

Next Steps

Continuing to work with partner organisations, including the development of a resource about environmental quality.

Collaboration with University of Salford to develop and test a tool to assess the qualities of green and blue spaces for use by organisations running nature-based activities for health and nature recovery.

This project work is informing our collaborations with Natural England on nature recovery and green social prescribing.

